

REMARKS

Claims 1, 4, 5, 7, 9, 13 and 15-18 are amended in order to more particularly point out, and distinctly claim the subject matter which the Applicants regard as their invention. Claims 2, 3, 8, 10, and 11 are canceled herein without prejudice or disclaimer. The Applicants respectfully submit that no new matter has been added. It is believed that this Amendment is fully responsive to the Office Action dated October 26, 2011. The Applicants wish to Thank Examiner Ford for scheduling the interview of January 23, 2012 for discussing claim language for overcoming the outstanding rejections under 35U.S.C. 35 §112, second paragraph.

In the Office Action, Claims 3 and 10, 5 and 7, and 15-17 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regard as the invention. Reconsideration and removal of these rejections are respectfully requested.

Claims 3 and 10 are cancelled. Claims 5, 7 and 15-17 are amended to more clearly define the claimed invention. In view of the canceling of Claims 3 and 10, and the above-indicated amendments, removal of these rejections is respectfully requested.

In the Office Action, Claims 1-5, 8, 10, 11, 14-16, and 18-20 are rejected under 35 U.S.C. §102(b) as being anticipated by Yamamoto et al. (U.S. 2002/0197145); Claims 1-20 are rejected under 35 U.S.C. §102(b) as being anticipated by Takanabe (U.S. 5,277,579); and Claims 6, 7, 9, 12, 13 and 17 are rejected under 35 U.S.C. §103(a) as being unpatentable over Yamamoto et al. in view of Takanabe. Reconsideration and removal of these rejections are respectfully requested.

In the rejection, the Office Action asserts that Yamamoto teaches a substrate processing apparatus that has a load lock/standby chamber for supporting a substrate in a jig, a transfer chamber, a processing chamber disposed above the load lock chamber, an opening section having a door and provided at the rear side of the transfer chamber, and a carrier load mount for loading a carrier.

The Office Action asserts that Claims 2, 8, 10 and 11 are drawn to an intended use of the apparatus and do not distinguish from the prior art. These claims have been cancelled. It is also asserted that Yamamoto shows a cleaning unit within a transfer chamber, and provides a load lock and transfer chamber, in order, from the rear side of the apparatus, wherein the opening section is provided at the rear side of the transfer chamber.

In citing Takanabe, the Office Action asserts that Takanabe teaches a substrate processing apparatus having a load lock/standby chamber for supporting a substrate in a jig, a transfer chamber, a processing chamber disposed above the load lock chamber, an opening section having a door and provided at the rear side of the transfer chamber, and a carrier load mount for loading a carrier, the carrier load mount casing being offset to one side. It is also alleged that the transfer chamber comprises a transfer device disposed on one side and an alignment device on the other, in addition to a cleaning unit, within the transfer chamber to clean its atmosphere and that Takanabe provides a load lock and transfer chamber, in order, from the rear side of the apparatus where the opening section is provided at the rear side of the transfer chamber, with the load lock chamber offset relative to the center axis.

In the obviousness rejection of Claims 6, 7, 9, 12, 13 and 17, the Office Action alleges that Yamamoto installs a substrate transfer device within the transfer chamber but does not teach an aligner, and cites Takanabe to show a substrate aligner within the transfer chamber to align the orientation flat of each wafer in the desired direction so as to facilitate accurate transfer to the adjacent load lock chamber, and alleges it would have been obvious to combine the substrate aligner within Yamamoto's transfer chamber.

Applicants believe the Office Action has mischaracterized the Yamamoto reference. The opening (5) and door (6) of Yamamoto, referred to in the Office Action are not in a location at the side of the transfer chamber where the load lock is not arranged, but rather is in a wall between an antechamber chamber (3) (standby chamber) and a wafer transfer room (22) (transfer chamber).

Applicants believe the Takanabe reference is also mischaracterized in the Office Action. The opening (G2) referred to in the Office Action is in a front wall of a transfer chamber (300) (robot chamber) and is located at the upper portion of that side of the lower chamber (200). Gate (G1) is arranged to carry a wafer from the cassette chamber (400) into the robot chamber (300) by the robot (3), while gate (G2) is arranged for passage of a wafer from the robot chamber (300) to a lower chamber (200) of the processing system.

It is respectfully submitted that the cited references do not teach or suggest the presently claimed arrangement of a substrate processing apparatus.

In view of the aforementioned amendments and accompanying remarks, Claims 1, 4-7, 9, and 12-20, as amended, are believed to be patentable and in condition for allowance, which action, at an early date, is requested.

U.S. Patent Application Serial No.: **10/593,282**
Amendment filed January 26, 2012
Reply to OA dated October 26, 2011

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact the Applicants' undersigned Attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, the Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

KRATZ, QUINTOS & HANSON, LLP



William G. Kratz, Jr.
Agent for Applicants
Reg. No. 22,631

WGK/kn

Atty. Docket No. **060711**
4th Floor
1420 K Street, N.W.
Washington, D.C. 20005
(202) 659-2930



23850

PATENT & TRADEMARK OFFICE